Paper Reference(s) 4PH1 / 1P 4SD0 / 1P
Pearson Edexcel International GCSE (9–1)

Physics
Science (Double Award) 4SD0
Paper: 1P

Time: 2 hours plus your additional time allowance

FORMULAE BOOKLET

You may find the following formulae useful.

energy transferred = current × voltage × time

$$E = I \times V \times t$$

frequency = $\dfrac{1}{\text{time period}}$

$$f = \dfrac{1}{T}$$

power = $\dfrac{\text{work done}}{\text{time taken}}$

$$P = \dfrac{W}{t}$$

power = $\dfrac{\text{energy transferred}}{\text{time taken}}$

$$P = \dfrac{W}{t}$$

orbital speed = $\dfrac{2\pi \times \text{orbital radius}}{\text{time period}}$

$$v = \dfrac{2 \times \pi \times r}{T}$$

(continued on the next page)

(final speed)^2 = (initial speed)^2 +
(2 × acceleration × distance moved)

$$v^2 = u^2 + (2 \times a \times s)$$

pressure × volume = constant

$$p_1 \times V_1 = p_2 \times V_2$$

$$\frac{\text{pressure}}{\text{temperature}} = \text{constant} \qquad \frac{p_1}{T_1} = \frac{p_2}{T_2}$$

Where necessary, assume the acceleration of free fall, g = 10 m/s^2.